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ABSTRACT

Disclosed is a method for efficiently separating a sapphire wafer serving as a substrate, on which semiconductor elements are formed, into unit chips by scribing the sapphire
5 wafer, after grinding and lapping a rear surface of the sapphire wafer and then sand-blasting the sapphire wafer. The method includes the steps of: (a) grinding a rear surface of the sapphire wafer so that the sapphire wafer has a designated thickness; (b) lapping the rear surface of the ground sapphire
10 wafer so that the sapphire wafer has a designated thickness; (c) polishing the rear surface of the lapped sapphire wafer so that the sapphire wafer has a designated thickness; (d) sand-blasting the rear surface of the polished sapphire wafer by uniformly blasting particles at a designated pressure during a
15 designated time onto the rear surface of the polished sapphire wafer; and (e) scribing the rear surface of the sand-blast ground sapphire wafer.